involved than Hadley mentions, and it is more likely that in this case the stimulus which causes the fantail to follow the flycatcher is the latter's behavioural, and to a lesser extent morphological, resemblance to a young Rhipidura. The role of schistaceus in this relationship appears to be a purely passive one. The well-documented case of Dunlins (Calidris alpina) following Golden plovers (Pluvialis apricaria) around like shadows on the breeding grounds is reminiscent of this situation.

It is the tail-posture (see sketch) which is of particular interest, insofar as it is not typically monarchine. The Hawaiian monarchine genus Chasiempis is another recorded as carrying the tail upright. While searching for food amongst the underbrush and foliage, members of this genus characteristically droop and quiver the wings and erect the fanned tail almost vertically over the back (Perkins 1903, pp. 379-80; Peterson 1961, p. 327). Some species of Clytorhynchus, the shrike-billed monarchs, spread the tail when excited and flick it up and down (Mayr 1945, p. 141). Mayrornis lessoni, as has already been mentioned, sometimes spreads the tail like a fan. Of the genus Trochocercus, which is closely related to Terpsiphone, the species cyanomelas and nitens habitually fan the tail and droop the wings as they move about searching for food (Chapin 1953). Of the above-mentioned species, Chasiempis, Mayrornis and most forms of Clytorhynchus have white- or pale-tipped rectrices which show to advantage only when the tail is so fanned. The tail-posture of Mayrornis is thus not as unusual as it may at first seem when the above examples are also considered. Acknowledgement

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Characteristic posture of Mayrornis schistaceus Cryptogamic Herbarium of the British Museum of Natural History for identifying the two mosses, and to Mr. I. C. J. Galbraith and Mr. Derek Goodwin of the Bird Section for reading the manuscript.

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## Notes on a White-eyed Pochard x Marbled Teal hybrid

by Bryan L. Sage

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So far as I have been able to ascertain only one intergeneric cross involving the Marbled Teal (Marmaronetia angustirostris Menetries]) has ever been recorded, and that refers to a captive cross with the White-eyed

Pochard (Aythya nyroca [Guldenstadt]). The hybrid resulting from this cross has not previously been fully described or illustrated.

The specimen forming the subject of this paper is now in the Rothschild collection at the American Museum of Natural History in New York, registered number AMNH 734552. This specimen was exhibited by Lord Rothschild to the British Ornithologists' Club on 8th May, 1929 (see Bull. Brit. Orn. Cl. 49: 96), and is clearly the one mentioned by SethSmith (1911) and Page (1914). This hybrid was received by the Zoological Society of London on 20th March, 1911, and died on 22nd February, 1912. Although the identity of the male parent has not apparently been recorded, the characters suggest that it was the White-eyed Pochard.


White-eyed Pochard x Marbled Teal (centre) with males of the parental species.

## DESCRIPTION

White-eyed Pochard x Marbled Teal, adult male.
This hybrid, in colour, is a diluted version of the male White-eyed Pochard or Ferruginous Duck, with the rich reddish-chestnut of that species replaced by deep ginger. The back and mantle are dark brownishginger, the feathers having broad paler tips so that the pattern is similar to that of the Marbled Teal. The forehead, crown, and nape are almost as richly coloured as in the White-eyed Pochard, but each feather has a subterminal blackish mark resulting in a speckled effect. The area around and posterior to the eye is blackish to dark brown. The general facial colour
is richer than in the female White-eyed Pochard, but nowhere near as chestnut as in the male. The chin and foreneck of the hybrid are mottled whitish, as is often the case with females of the White-eye in summer plumage and in both sexes in juvenile plumage; a white chin spot is also present in the hybrid. The underparts shade from pale ginger on the breast to very pale coffee-white on the abdomen; the under tail-coverts are whitish suffused with ginger. Primaries brownish-grey, secondaries whitish shading to pale brownish terminally.

## COMPARATIVE MEASUREMENTS

Measurements in millimetres of the hybrid and males of the parental species

|  | White-eyed <br> Pochard | Hybrid | Marbled |
| :--- | :---: | :---: | :---: |
| Teal |  |  |  |

Measurements marked * are taken from Delacour (1959), other measurements made by the author.

## DISCUSSION

A study of the morphology of the hybrid reveals no characters that might be considered of evolutionary significance. In colour it is a dilute version of Aythya nyroca, while the basic plumage pattern is that of Marmaronetta angustirostris. It is of interest to note the persistence in the hybrid of the dark area round and behind the eye characteristic of the Marbled Teal, and the occurrence of the white chin spot normally found in both sexes of the White-eyed Pochard. As can be seen the measurements of the hybrid are all intermediate between those of the parental species, the sole exception being the culmen which is fractionally longer than in either of them.

Despite the fact that the breeding range of the Marbled Teal and the White-eyed Pochard are sympatric to a certain extent, and that both species are somewhat similar in their habitat preference, there is no record of this inter-generic cross occurring under natural conditions. The taxonomic position of the Marbled Teal has been discussed by Johnsgard (1961) who concluded, from several aspects of its behaviour and the tracheal anatomy, that its affinities were with the pochards (Aythyini) and that it should not be placed in the genus Anas. The pre-copulatory behaviour of the Marbled Teal suggests that successful copulation is more likely to occur with one of the pochards, rather than with any species of Anas. In this respect it is significant that the extensive literature of hybrid ducks reared in captivity contains no record of a cross between Marmaronetta and Anas. As Johnsgard has pointed out, the very different tracheal structures of Anas and the Netta-Aythya group are bridged by the intermediate structure found in the Marbled Teal.

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## Systematic notes on the Cattle Egret (Bubulcus ibis)

by C. Vaurie

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The spectacular expansion of the Cattle Egret to the New World has received much attention but little has been paid to its geographical variation.

Two subspecies with a very wide distribution can be easily recognized (nominate ibis Linnaeus, 1758, type locality, Egypt, and coromandus Boddaert, 1783, type locality, Coromandel coast), with the possible addition of a local but doubtful form (seychellarum Salomonsen, 1934) known only from the Seychelles in the Indian Ocean. Nominate ibis breeds from the southern part of the Iberian Peninsula east to the Caspian districts of northern Iran and neighbouring Transcaspia, and south through Arabia and Africa, including Madagascar and the Mascarenes, to Cape Province; coromandus breeds from eastern Baluchistan and India east to eastern China and southern Japan, and south to the Sundas, Celebes, and Moluccas. Nominate ibis has expanded to both North and South America since the beginning of the twentieth century and recently also north to southern France and the delta of the Volga; coromandus, which had been widely introduced in Australia, is believed to have also reached the north of this sub-continent unaided.

The lengths of the wing and tail are similar in the two subspecies, but the tarsus of coromandus averages longer, its bill slightly longer and thicker, and, as a rule, its tibia is not feathered quite so far down as in nominate ibis. The measurements of twenty males and twenty females of each subspecies are as follows:
nominate ibis
Wing; males, 241-266 (253), females, 240-258 (247.6)
Tail; males, 79-93 (87.5), females, 74-93 (86)
Bill from skull; males, 61-71 (66.3), females, 60-70 (65.5)
Tarsus; males, 70-85 (77), females, 70-81 (76.1)
Bare tibia (length); males, 19-34 (25.3), females, 16-38 (29)

## coromandus

Wing; males, 243-260 (253.8), females, 230-256 (246.4)
Tail; males, 76-98 (85.6), females, 76-92 (83.7)
Bill; males, 66-77 (71.1), females, 62-73 (68.5)
Tarsus; males, 80-91 (85), females, 78-87 (82.3)
Bare tibia; males, 27-52 (38), females, 23-52 (38.6)

